

Certificate No. C – 00194

ITSO Certificate of Compliance

To: Corvia Ltd (trading as Ticketer)
Chilton House, Charnham Lane, Hungerford, Berks RG17 0EY

For: Ticketer ETM TK200 Orbit Crypto
Software version: 5.0.1.1; Hardware version: ETML-V7
Card Reader: Gemini 2000 Orbit Crypto v1.0

This is to certify that the above product has been tested as required by ITSO for compliance against ITSO TS 1000 Specification Version: 2.1.4 Corrigendum 9.

Test Reports Ref: *PO_0010_Ticketer_TK200_Orbit_Crypto_Test Report*
Dated: 29th May 2019

This product supports the functions: ITSO POST and communicates within an ITSO environment as listed in Schedule A of this Certificate.

This product may only be used by ITSO Licensed Members complying with the conditions and constraints listed in Schedule B.

Signed for and on behalf of ITSO:



Title: Exec Chairman

Dated: 30 May 2019

Certificate Valid until: 29 May 2026



Schedule A

ITSO Manufacturer ID: 000110

The Ticketer TK200 is a bus ETM with new NFC reader, Gemini 2000 Orbit Crypto v1.0. It uses the Unicaud certified POST kernel software¹.

This POST is touch screen and communicates with CMD2, CMD4 and CMD7.

The IPE's supported are represented in the following table:

IPE	Create	Modify	Accept	Delete
TYP 2 – Stored Travel Rights	✓	✓	✓	✓
TYP 14 – Entitlement	✓	✓	✓	✓
TYP 16 – ITSO ID and Entitlement	✓	✓	✓	✓
TYP 22 FR1 – Area Based Ticket	✓	✓	✓	✓
TYP 22 FR2 – Area Based Ticket	✓	✓	✓	✓
TYP 23 FR1 – Journey Ticket	✓	✓	✓	✓
TYP 23 FR2 – Journey Ticket	✓	✓	✓	✓
TYP 24 – Journey Ticket with Reservations and Special Restrictions	✓	✓	✓	✓
TYP 27 – Period Pass (space saving)	✓	✓	✓	✓
TYP 28 – Carney (space saving)	✓	✓	✓	✓
TYP 29 FR1 – Multi Journey Ticket (space saving)	✓	✓	✓	✓
TYP 29 FR2 – Multi Journey Ticket (space saving)	✓	✓	✓	✓
Transient Ticket Log FR1	✓	✓	✓	n/a
Transient Ticket Log FR2	✓	✓	✓	n/a
Transient Ticket Log FR3	✓	✓	✓	n/a
Transient Ticket Log FR 4	✓	✓	✓	n/a

¹ Certificate C-00163 Unicaud POST Kernel, HL2CE.dll version: 5.0.1.1/HousekeepingCE.dll version: 2.1.4.62

Benchmarking Results

Value Record Data Group Modification

CMD Type	Average
CMD2	395ms
CMD4	125ms
CMD7	356ms

Transient Ticket Record Creation

CMD Type	Average
CMD2	337ms
CMD7	258ms

Device Image





Schedule B

List of the conditions and/or constraints applied by ITS0.

n/a